```
FILE 'HOME' ENTERED AT 14:20:44 ON 16 MAR 2005
=> file biosis medline caplus wpids uspatfull
                                                  SINCE FILE
COST IN U.S. DOLLARS
                                                                  TOTAL.
                                                       ENTRY
                                                                SESSION
FULL ESTIMATED COST
                                                        0.21
                                                                   0.21
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FILE 'USPATFULL' ENTERED AT 14:21:02 ON 16 MAR 2005
CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)
*** YOU HAVE NEW MAIL ***
=> s oligonucleotide? (5a) precursor
           392 OLIGONUCLEOTIDE? (5A) PRECURSOR
=> s 12 and dioxetane
L2 NOT FOUND
The L-number entered could not be found. To see the definition
of L-numbers, enter DISPLAY HISTORY at an arrow prompt (=>).
=> s l1 and dioxetane
             5 L1 AND DIOXETANE
=> dup rem 12
PROCESSING COMPLETED FOR L2
              5 DUP REM L2 (0 DUPLICATES REMOVED)
=> d 13 bib abs 1-5
1.3
     ANSWER 1 OF 5 USPATFULL on STN
AN
       2003:127059 USPATFULL
TI
       Method for the amplification and detection of a nucleic acid fragment of
       interest
       Ebersole, Richard C., Wilmington, DE, UNITED STATES
IN
       Hendrickson, Edwin R., Hockessin, DE, UNITED STATES
       Fitzpatrick-McElligott, Sandra, Rose Valley, PA, UNITED STATES
       Perry, Michael P., Landenberg, PA, UNITED STATES
PΙ
       US 2003087271
                          A1
                               20030508
ΑT
       US 2002-176422
                          A1
                               20020620 (10)
       Continuation of Ser. No. US 1998-125832, filed on 26 Aug 1998, PENDING
RLI
PRAI
       WO 1997-US2892
                           19970227
       US 1996-12636P
                           19960301 (60)
DT
       Utility
FS
       APPLICATION
       E I DU PONT DE NEMOURS AND COMPANY, LEGAL PATENT RECORDS CENTER, BARLEY
LREP
       MILL PLAZA 25/1128, 4417 LANCASTER PIKE, WILMINGTON, DE, 19805
CLMN
       Number of Claims: 13
ECL
       Exemplary Claim: 1
DRWN
       13 Drawing Page(s)
LN.CNT 2151
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB
       A method is provided for the replication and detection of a specific
       nucleic acid target using a detection probe. The probe is present
```

throughout the amplification reaction but does not participate in the

reaction in that it is not extended. The probe contains sequence complementary to the replicated nucleic acid analyte for capture of the analyte by hybridization. Additionally the probe or analyte contains at least one reactive ligand to permit immobilization or reporting of the probe/analyte hybrid.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

```
L3 ANSWER 2 OF 5 USPATFULL on STN
```

AN 2002:198587 USPATFULL

TI Dioxetane labeled probes and detection assays employing the same

IN Bronstein, Irena, Newton, MA, UNITED STATES
Edwards, Brooks, Cambridge, MA, UNITED STATES
Martin, Christopher, Bedford, MA, UNITED STATES
Voyta, John, Sudbury, MA, UNITED STATES

PI US 2002106687 A1 20020808

AI US 2002-83474 A1 20020227 (10)

RLI Continuation of Ser. No. US 1999-340726, filed on 29 Jun 1999, PENDING Continuation of Ser. No. US 1998-18180, filed on 3 Feb 1998, GRANTED, Pat. No. US 6063574 Continuation of Ser. No. US 1996-767479, filed on 16 Dec 1996, GRANTED, Pat. No. US 5800999

DT Utility

FS APPLICATION

LREP PIPER MARBURY RUDNICK & WOLFE LLP, Supervisor, Patent Prosecution Services, 1200 Nineteenth Street, N.W., Washington, DC, 20036-2412

CLMN Number of Claims: 6 ECL Exemplary Claim: 1 DRWN 1 Drawing Page(s) LN.CNT 900

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Probes labeled with 1,2-dioxetane precursors can be employed in a variety of assays. The probes may be nucleic acid, peptide nucleic acid, proteins including enzyme, antibody or antigen, steroid, carbohydrate, drug or non-drug hapten. The probe is provided with a 1,2-dioxetane precursor bound thereto, generally either covalently, or a strong ligand bond. The dioxetane precursor moiety is converted to a bound 1,2-dioxetane by exposure to singlet oxygen. These dioxetane (labels) either spontaneously decompose, or are induced to decompose by an appropriate trigger to release light. The trigger may be a change in pH temperature, or an agent which removes a protective group. Assay formats in which these 1,2-dioxetane labeled probes and referents may be used to include hybridization assays, immuno assays, gel-based assays and Capillary Zone Electrophoresis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

```
L3 ANSWER 3 OF 5 USPATFULL on STN
```

AN 2002:238820 USPATFULL

TI **Dioxetane** labeled probes and detection assays employing the same

IN Bronstein, Irena, Newton, MA, United States
Edwards, Brooks, Cambridge, MA, United States
Martin, Christopher, Bedford, MA, United States
Voyta, John, Sudbury, MA, United States

PA Tropix, Inc., Bedford, MA, United States (U.S. corporation)

PI US 6451531 B1 20020917

AI US 1999-340726 19990629 (9)

RLI Continuation of Ser. No. US 1998-18180, filed on 3 Feb 1998, now patented, Pat. No. US 6063574 Continuation of Ser. No. US 1996-767479, filed on 16 Dec 1996, now patented, Pat. No. US 5800999

DT Utility

FS GRANTED

EXNAM Primary Examiner: Geist, Gary; Assistant Examiner: Owens, Jr., Howard V.

LREP Marbury, Piper, Rudnick & Wolf, LLP, Kelber, Steven B.

CLMN Number of Claims: 6

ECL Exemplary Claim: 1

DRWN 1 Drawing Figure(s); 1 Drawing Page(s) CAS INDEXING IS AVAILABLE FOR THIS PATENT. AB Probes labeled with 1,2-dioxetane precursors can be employed in a variety of assays. The probes may be nucleic acid, peptide nucleic acid, proteins including enzyme, antibody or antigen, steroid, carbohydrate, drug or non-drug hapten. The probe is provided with a 1,2dioxetane precursor bound thereto, generally either covalently, or a strong ligand bond. The dioxetane precursor moiety is converted to a bound 1,2-dioxetane by exposure to singlet oxygen. These dioxetane (labels) either spontaneously decompose, or are induced to decompose by an appropriate trigger to release light. The trigger may be a change in pH temperature, or an agent which removes a protective group. Assay formats in which these 1,2-dioxetane labeled probes and referents may be used to include hybridization assays, immuno assays, gel-based assays and Capillary Zone Electrophoresis. CAS INDEXING IS AVAILABLE FOR THIS PATENT. 1.3 ANSWER 4 OF 5 USPATFULL on STN 2000:61391 USPATFULL AN TI Dioxetane labeled probes and detection assays employing the Bronstein, Irena, Newton, MA, United States IN Edwards, Brooks, Cambridge, MA, United States Martin, Christopher, Bedford, MA, United States Voyta, John, Sudbury, MA, United States PΑ Tropix, Inc., Bedford, MA, United States (U.S. corporation) PΙ US 6063574 20000516

ΑI US 1998-18180 19980203 (9) RLI Continuation of Ser. No. US 1996-767479, filed on 16 Dec 1996, now patented, Pat. No. US 5800999 DT Utility FS Granted EXNAM Primary Examiner: Kunz, Gary L. LREP Oblon, Spivak, McClelland, Maier & Neustadt, P.C. Number of Claims: 5 CLMN ECL Exemplary Claim: 1,2 DRWN 1 Drawing Figure(s); 1 Drawing Page(s) LN.CNT 868 CAS INDEXING IS AVAILABLE FOR THIS PATENT. Probes labeled with 1,2-dioxetane precursors can be employed

Probes labeled with 1,2-dioxetane precursors can be employed in a variety of assays. The probes may be nucleic acid, peptide nucleic acid, proteins including enzyme, antibody or antigen, steroid, carbohydrate, drug or non-drug hapten. The probe is provided with a 1,2-dioxetane precursor bound thereto, generally either covalently, or a strong ligand bond. The dioxetane precursor moiety is converted to a bound 1,2-dioxetane by exposure to singlet oxygen. These dioxetane (labels) either spontaneously decompose, or are induced to decompose by an appropriate trigger to release light. The trigger may be a change in pH temperature, or an agent which removes a protective group. Assay formats in which these 1,2-dioxetane labeled probes and referents may be used to include hybridization assays, immuno assays, gel-based assays and Capillary Zone Electrophoresis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 5 OF 5 USPATFULL on STN

L3

```
AN 1998:104572 USPATFULL

TI Dioxetane-precursor-labeled probes and detection assays employing the same

IN Bronstein, Irena, Newton, MA, United States
Edwards, Brooks, Cambridge, MA, United States
Martin, Christopher, Bedford, MA, United States
```

Voyta, John, Sudbury, MA, United States

PA Tropix, Inc., Bedford, MA, United States (U.S. corporation)

PI US 5800999 19980901 AI US 1996-767479 19961216 (8)

DT" Utility FS Granted

EXNAM Primary Examiner: Kunz, Gary L.

LREP Oblon, Spivak, McClelland, Maier & Neustadt, P.C.

CLMN Number of Claims: 11 ECL Exemplary Claim: 1,9

DRWN 1 Drawing Figure(s); 1 Drawing Page(s)

LN.CNT 911

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Probes labeled with 1,2-dioxetane precursors can be employed in a variety of assays. The probes may be nucleic acid, peptide nucleic acid, proteins including enzyme, antibody or antigen, steroid, carbohydrate, drug or non-drug hapten. The probe is provided with a 1,2-dioxetane precursor bound thereto, generally either covalently, or a strong ligand bond. The dioxetane precursor moiety is converted to a bound 1,2-dioxetane by exposure to singlet oxygen. These dioxetane (labels) either spontaneously decompose, or are induced to decompose by an appropriate trigger to release light. The trigger may be a change in pH temperature, or an agent which removes a protective group. Assay formats in which these 1,2-dioxetane labeled probes and referents may be used to include hybridization assays, immuno assays, gel-based assays and Capillary Zone Electrophoresis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=>"d his (FILE 'HOME' ENTERED AT 14:20:44 ON 16 MAR 2005) FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 14:21:02 ON 16 MAR 2005 L1 392 S OLIGONUCLEOTIDE? (5A) PRECURSOR L2 5 S L1 AND DIOXETANE 5 DUP REM L2 (0 DUPLICATES REMOVED) L3 => s l1 and chemiluminesc? 40 L1 AND CHEMILUMINESC? => s 14 not 13 35 L4 NOT L3 => s 15 and array? L6 26 L5 AND ARRAY? => dup rem 16 PROCESSING COMPLETED FOR L6 26 DUP REM L6 (0 DUPLICATES REMOVED) => s 17 and oligo? (7a) chemilumesc? 0 L7 AND OLIGO? (7A) CHEMILUMESC? => s 18 and precursor Ь9 0 L8 AND PRECURSOR => s 17 and precursor? 26 L7 AND PRECURSOR? => d 110 bib abs 1-26 L10 ANSWER 1 OF 26 USPATFULL on STN AN 2004:247217 USPATFULL ΤI Target-dependent transcription using deletion mutants of N4 RNA polymerase IN Davydova, Elena K., Chicago, IL, UNITED STATES Rothman-Denes, Lucia B., Chicago, IL, UNITED STATES Dahl, Gary A., Madison, WI, UNITED STATES Gerdes, Svetlana Y., Madison, WI, UNITED STATES Jendrisak, Jerome J., Madison, WI, UNITED STATES PΤ US 2004191812 A1 20040930 ΑI US 2003-743975 A1 20031223 (10) RLI Continuation-in-part of Ser. No. US 2002-153219, filed on 22 May 2002, PENDING PRAI US 2001-292845P 20010522 (60) US 2002-436062P 20021223 (60) DTUtility FS APPLICATION LREP QUARLES & BRADY LLP, FIRSTAR PLAZA, ONE SOUTH PINCKNEY STREET, P.O BOX 2113 SUITE 600, MADISON, WI, 53701-2113 CLMN Number of Claims: 53 Exemplary Claim: 1 ECL DRWN 29 Drawing Page(s) LN.CNT 9903 CAS INDEXING IS AVAILABLE FOR THIS PATENT. AΒ The present invention comprises novel methods, compositions and kits that use N4 vRNAP deletion mutants to detect and quantify analytes comprising one or multiple target nucleic acid sequences, including target sequences that differ by as little as one nucleotide or non-nucleic acid analytes, by detecting a target sequence tag that is joined to an analyte-binding substance. The method consists of an

annealing process, a DNA ligation process, an optional DNA polymerase extension process, a transcription process, and, optionally, a detection

```
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L10 ANSWER 2 OF 26 USPATFULL on STN
AN
       2004:178985 USPATFULL
ΤI
       Devices containing DNA encoding neurotrophic agents and related
       compositions and methods
       Baird, Andrew, London, UNITED KINGDOM
TN
      Gonzalez, Ana Maria, San Diego, CA, UNITED STATES
      Logan, Ann, Stourport on Severn, UNITED KINGDOM
       Berry, Martin, Edgbaston, UNITED KINGDOM
PA
       Selective Genetics, Inc., San Diego, CA (non-U.S. corporation)
      University of Birmingham, Edgbaston, UNITED KINGDOM (non-U.S.
       corporation)
       King's College, London, UNITED KINGDOM (non-U.S. corporation)
PΙ
       US 2004138155
                          A1
                               20040715
ΑI
       US 2003-348051
                          A1
                               20030117 (10)
       Continuation of Ser. No. US 1998-178286, filed on 23 Oct 1998, GRANTED,
RLI
       Pat. No. US 6551618 Continuation-in-part of Ser. No. US 1998-88419,
       filed on 1 Jun 1998, ABANDONED Continuation-in-part of Ser. No. US
       1997-805381, filed on 24 Feb 1997, ABANDONED Continuation-in-part of
       Ser. No. US 1997-805382, filed on 24 Feb 1997, ABANDONED
       Continuation-in-part of Ser. No. US 1997-805383, filed on 24 Feb 1997,
      ABANDONED Continuation-in-part of Ser. No. US 1996-718904, filed on 24
       Sep 1996, GRANTED, Pat. No. US 6037329 Continuation-in-part of Ser. No.
      US 1995-441979, filed on 16 May 1995, ABANDONED Continuation-in-part of
       Ser. No. US 1994-213446, filed on 15 Mar 1994, ABANDONED
       Continuation-in-part of Ser. No. US 1994-213447, filed on 15 Mar 1994,
      ABANDONED Continuation-in-part of Ser. No. US 1994-297961, filed on 29
      Aug 1994, ABANDONED Continuation-in-part of Ser. No. US 1994-305771,
       filed on 13 Sep 1994, ABANDONED
      Utility
      APPLICATION
LREP
```

DT

FS

SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092

CLMN Number of Claims: 80 ECL Exemplary Claim: 1

DRWN 5 Drawing Page(s) LN.CNT 3891

TI

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Devices useful in the delivery of DNA encoding neurotrophic agents, anti-fibrotic agents, and related compositions are disclosed herein for use in the treatment of central and/or peripheral nervous system injury. Methods of making and using the disclosed devices and DNA are also described. In various embodiments, the invention also discloses compositions and devices that may further include a targeting agent, such as a polypeptide that is reactive with an FGF receptor (e.g., bFGF), or another ligand that binds to cell surface receptors on neuronal cells, or a support cell. The invention also discloses methods of promoting neuronal survival and regeneration via transfection of an axon as it grows through a device or composition of the present invention, or via transfection of a repair cell.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

```
L10
    ANSWER 3 OF 26 USPATFULL on STN
```

AN2004:38741 USPATFULL

Viral vectors with modified tropism

IN Sosnowski, Barbara A., Coronado, CA, UNITED STATES Baird, Andrew, San Diego, CA, UNITED STATES Pierce, Glenn F., Rancho Santa Fe, CA, UNITED STATES Curiel, David T., Birmingham, AL, UNITED STATES Douglas, Joanne T., Huntsville, AL, UNITED STATES Rogers, Buck E., Birmingham, AL, UNITED STATES

Selective Genetics, Inc., San Diego, CA, UNITED STATES (U.S. PA corporation) University of Birmingham, Birmingham, AL, UNITED STATES (U.S.

```
corporation)
PΤ
       US 2004029280
                          A1
                               20040212
ΑI
       US 2003-408849
                         A1
                               20030403 (10)
       Continuation of Ser. No. US 1998-39060, filed on 13 Mar 1998, GRANTED,
RLI
       Pat. No. US 6613563
PRAI
       US 1997-65265P
                           19971110 (60)
       US 1997-40782P
                           19970314 (60)
DT
       Utility
FS
       APPLICATION
LREP
       SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,
       SEATTLE, WA, 98104-7092
       Number of Claims: 45
CLMN
       Exemplary Claim: 1
ECL
       21 Drawing Page(s)
DRWN
LN.CNT 6309
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention relates to gene therapy. In particular,
       therapeutic agents, therapeutic gene products, and compositions are
       disclosed. Various systems and methods useful in targeting and
       delivering non-native nucleotide sequences to specific cells are
       disclosed, wherein virus-antibody-ligand conjugates are used to
       facilitate targeting and delivery.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L10 ANSWER 4 OF 26 USPATFULL on STN
AN
       2004:31734 USPATFULL
TI
       Regulation of human serotonin receptor precursor
ΤN
       Xiao, Yonghong, Cambridge, MA, UNITED STATES
PΙ
       US 2004023876
                        A1 20040205
ΑI
       US 2003-399405
                        A1
                               20030423 (10)
       WO 2001-EP12473
                               20011029
DT
       Utility
FS
       APPLICATION
       BANNER & WITCOFF, 1001 G STREET N W, SUITE 1100, WASHINGTON, DC, 20001
TREP
CLMN
       Number of Claims: 71
ECL
       Exemplary Claim: 1
DRWN
       12 Drawing Page(s)
LN.CNT 2592
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB
       Reagents which regulate human serotonin receptor precursor and
       reagents which bind to human serotonin receptor precursor gene
       products can play a role in preventing, ameliorating, or correcting
       dysfunctions or diseases including, but not limited to, urinary
       incontinence, CNS and cardiovascular disorders.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L10 ANSWER 5 OF 26 USPATFULL on STN
AN
       2004:31146 USPATFULL
       Composite arrays
TI
ΙN
       Browne, Kenneth A., Poway, CA, UNITED STATES
PΙ
       US 2004023284 A1
                               20040205
ΑI
       US 2003-621803
                         A1
                               20030717 (10)
       US 2002-400189P
PRAI
                         20020731 (60)
DT
       Utility
FS
       APPLICATION
LREP
       GEN PROBE INCORPORATED, 10210 GENETIC CENTER DRIVE, SAN DIEGO, CA, 92121
CLMN
       Number of Claims: 31
ECL
       Exemplary Claim: 1
DRWN
       7 Drawing Page(s)
LN.CNT 2011
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB
       Compositions, methods and devices for detecting nucleic acids. The
       invention particularly regards composite arrays of immobilized
       amplification primers and hybridization probes. Also disclosed are
       compositions and methods for covalently immobilizing oligonucleotides
       and other biological molecules to glass and plastic surfaces.
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CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 6 OF 26 USPATFULL on STN

T.10

L10

AN

ΤI

IN PA ANSWER 8 OF 26 USPATFULL on STN

Iterative and regenerative DNA sequencing method Jones, Douglas H., Cedar Rapids, IA, UNITED STATES

UNIVERSITY OF IOWA RESEARCH FOUNDATION, Iowa City, IA (U.S. corporation)

2003:250994 USPATFULL

```
2004:24656 USPATFULL
AN
       Microparticle based signal amplification for the detection of analytes
ΤI
       Li, Xing-Xiang, Vienna, VA, UNITED STATES
IN
                               20040129
PΙ
       US 2004018495
                         A1
       US 2002-205195
                          Α1
                               20020724 (10)
ΑI
DT
       Utility
FS
       APPLICATION
       Mark W. Roberts, Esq., DORSEY & WHITNEY LLP, Suite 3400, 1420 Fifth
LREP
       Avenue, Seattle, WA, 98101
       Number of Claims: 75
CLMN
ECL
       Exemplary Claim: 1
DRWN
       15 Drawing Page(s)
LN.CNT 2024
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       Microparticle based amplification (MBA) for high sensitivity and high
AB
       speed analyte detection is described. MBA is based on signal
       amplification achieved by use of a signal amplification microparticle
       that contains a plurality of signaling molecules attached to a plurality
       of positions on the surface of the microparticle, in combination with a
       plurality of analyte binding molecules attached to a plurality of
       positions on the surface. Each signaling molecule in turn has a
       plurality of signal emitting moieties, such as acridinium, attached
       thereto. This is combined with a separating microparticle such as a
       ferromagnetic particle, also having an analyte binding molecule attached
       to the surface so that a complex comprising the analyte, the signal
       amplification microparticle and the separating microparticle is formed.
       The complex emits a signal that is amplified many fold relative to the
       stoichemetric amount of analyte molecules in the sample. Particular
       embodiments include methods for detecting bacteria, antigens, antibodies
       and nucleic acids.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L10 ANSWER 7 OF 26 USPATFULL on STN
       2003:312178 USPATFULL
AN
       Nucleic acid diagnostic reagents and methods for detecting nucleic
ΤI
       acids, polynucleotides and oligonucleotides
       Ward, David C., Old Lyme, CT, UNITED STATES
IN
       Breaker, Ronald, Guilford, CT, UNITED STATES
PΙ
       US 2003219775
                          A1
                               20031127
                               20021216 (10)
       US 2002-320191
                         A1
ΑT
PRAI
       US 2001-341658P
                          20011214 (60)
DT ·
       Utility
FS
       APPLICATION
       MCDONNELL BOEHNEN HULBERT & BERGHOFF, 300 SOUTH WACKER DRIVE, SUITE
LREP
       3200, CHICAGO, IL, 60606
CLMN
       Number of Claims: 16
ECL
       Exemplary Claim: 1
DRWN
       7 Drawing Page(s)
LN.CNT 2179
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       Methods for generating nucleic acid reagents useful for detecting
AB
       nucleic acids, polynucleotides, and oligonucleotides are disclosed.
       Selection techniques, enzymatic nucleic acid molecules, allozymes
       (allosteric nucleic acid sensor molecules), ribozymes, and DNAzymes used
       as diagnostic reagents and tools are described.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
```

```
PΙ
      US 2003175780
                         A1
                               20030918
AΙ
      US 2003-372696
                         A1
                               20030224 (10)
RLÍ
      Continuation of Ser. No. US 2001-837621, filed on 17 Apr 2001, PENDING
      Division of Ser. No. US 1998-35183, filed on 5 Mar 1998, GRANTED, Pat.
      No. US 6258533 Continuation-in-part of Ser. No. US 1996-742755, filed on
       1 Nov 1996, GRANTED, Pat. No. US 5858671
DT
      Utility
FS
      APPLICATION
LREP
      LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109
CLMN
      Number of Claims: 191
ECL
      Exemplary Claim: 1
DRWN
      9 Drawing Page(s)
LN.CNT 4482
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
      An iterative and regenerative method for sequencing DNA is described.
      This method sequences DNA in discrete intervals starting at one end of a
      double stranded DNA segment. This method overcomes problems inherent in
      other sequencing methods, including the need for gel resolution of DNA
      fragments and the generation of artifacts caused by single-stranded DNA
      secondary structures. A particular advantage of this invention is that
      it can create offset collections of DNA segments and sequence the
      segments in parallel to provide continuous sequence information over
```

long intervals. This method is also suitable for automation and multiplex automation to sequence large sets of segments.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

```
L10 ANSWER 9 OF 26 USPATFULL on STN
       2003:234694 USPATFULL
M\Delta
TT
       Viral vectors with modified tropism
IN
       Sosnowski, Barbara A., Coronado, CA, United States
       Baird, Andrew, San Diego, CA, United States
       Pierce, Glenn F., Rancho Santa Fe, CA, United States
       Curiel, David T., Birmingham, AL, United States
       Douglas, Joanne T., Huntsville, AL, United States
       Rogers, Buck E., Birmingham, AL, United States
PA
       Selective Gentics, Inc., San Diego, CA, United States (U.S. corporation)
       UAB Research Foundation, Birmingham, AL, United States (U.S.
       corporation)
PΙ
       US 6613563
                          B1
                               20030902
       US 1998-39060
ΑI
                               19980313 (9)
       US 1997-40782P
PRAI
                           19970314 (60)
       US 1997-65265P
                           19971110 (60)
DT
       Utility
FS
       GRANTED
EXNAM Primary Examiner: Chen, Shin-Lin
LREP
       Seed Intellectual Property Law Group PLLC
CLMN
       Number of Claims: 7
ECL
       Exemplary Claim: 1
DRWN
       39 Drawing Figure(s); 21 Drawing Page(s)
LN.CNT 6139
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB
       The present invention relates to gene therapy. In particular,
       therapeutic agents, therapeutic gene products, and compositions are
       disclosed. Various systems and methods useful in targeting and
       delivering non-native nucleotide sequences to specific cells are
       disclosed, wherein virus-antibody-ligand conjugates are used to
```

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

facilitate targeting and delivery.

```
L10 ANSWER 10 OF 26 USPATFULL on STN
AN
       2003:210021 USPATFULL
       SMDF and GGF neuregulin splice variant isoforms and uses thereof
TI
IN
       Carroll, Steven L., Homewood, AL, United States
PA
      UAB Research Foundation, Birmingham, AL, United States (U.S.
      corporation)
PΙ
      US 6602851
                         B1
                               20030805
```

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AΙ
       US 2000-684708
                                20001006 (9)
PRAI
       US 1999-158622P
                            19991008 (60)
DT
       Utility
       GRANTED
FS
       Primary Examiner: Kunz, Gary; Assistant Examiner: Gucker, Stephen
EXNAM
LREP
       Adler, Benjamin Aaron
CLMN
       Number of Claims: 6
       Exemplary Claim: 1
ECL
       31 Drawing Figure(s); 27 Drawing Page(s)
DRWN
LN.CNT 2819
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AR
```

Distinct cDNAs encoding six cysteine-rich domain-NRGs and four glial growth factor isoforms were identified and sequenced. Additional heterogeneity is found in the EGF-like (α - and β -isoforms) and carboxy terminal (a and b variant) regions of CRD-NRGs. Furthermore, the predicted GGF proteins contain glycosylation domains previously found only in mesenchymal NRGs. GGF mRNAs accumulate in axotomized nerve, a subpopulation of DRG neurons and most spinal cord motoneurons. CRD-NRGs, however, are undetectable in injured nerve except by RT-PCR. In contrast, the majority of DRG and spinal cord motor neurons express CRD-NRGs, with a β 1 isoform being most abundant and at least some of these proteins are secreted in a form capable of activating erbB receptors. Thus, GGF and CRD-NRG subfamilies are more structurally diverse than previously appreciated. NRG actions during Wallerian degeneration may be modulated by the action of distinct splice variants.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

```
ANSWER 11 OF 26 USPATFULL on STN
T.10
AN
       2003:200815 USPATFULL
TI
       Exponential amplification of nucleic acids using nicking agents
TN
       Van Ness, Jeffrey, Claremont, CA, UNITED STATES
       Galas, David J., Claremont, CA, UNITED STATES
       Van Ness, Lori K., Claremont, CA, UNITED STATES
PA
       Keck Graduate Institute, Claremont, CA, UNITED STATES, 91711 (U.S.
       corporation)
PΙ
       US 2003138800
                          A1
                               20030724
ΑI
       US 2002-196740
                          A1
                               20020715 (10)
       US 2002-345445P
PRAI
                           20020102 (60)
       US 2001-331687P
                           20011119 (60)
       US 2001-305637P
                           20010715 (60)
DT
       Utility
FS
       APPLICATION
LREP
       SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,
       SEATTLE, WA, 98104-7092
CLMN
       Number of Claims: 292
ECL
       Exemplary Claim: 1
DRWN
       30 Drawing Page(s)
LN CNT 6280
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AΒ
       The present invention provides methods and compositions for exponential
       amplification of nucleic acid molecules using nicking agents. In certain
       aspects, the amplification may be performed isothermally. This invention
       is useful in many areas such as disease diagnosis.
```

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

```
1.10
     ANSWER 12 OF 26 USPATFULL on STN
AN
        2003:127027 USPATFULL
TI
        Target activated nucleic acid biosensor and methods of using same
        Stanton, Marty, Stow, MA, UNITED STATES Epstein, David, Belmont, MA, UNITED STATES
IN
        Hamaguchi, Nobuko, Framingham, MA, UNITED STATES
PΙ
        US 2003087239
                             A1
                                   20030508
ΑI
        US 2001-952680
                             A1
                                   20010913 (9)
PRAI
        US 2000-232454P
                             20000913 (60)
        Utility
DT
FS
        APPLICATION
```

```
LREP
       MINTZ, LEVIN, COHN, FERRIS,, GLOVSKY AND POPEO, P.C., One Financial
       Cénter, Boston, MA, 02111
CLMN
       Number of Claims: 80
ECL
       Exemplary Claim: 1
DRWN
       17 Drawing Page(s)
LN.CNT 5429
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       Methods for engineering a target activated biosensor are provided.
       Biosensors comprise a plurality of nucleic acid sensor molecules labeled
       with a first signaling moiety and a second signaling moiety. The nucleic
       acid sensor molecules recognizes target molecules which do not naturally
       bind to DNA. Binding of a target molecule to the sensor molecules
       triggers a change in the proximity of the signaling moieties which leads
       to a change in the optical properties of the nucleic acid sensor
       molecules on the biosensor. Reagents and systems for performing the
       method are also provided. The method is useful in diagnostic
       applications and drug optimization.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
1.10
     ANSWER 13 OF 26 USPATFULL on STN
AN
       2003:120109 USPATFULL
TΙ
       Exponential nucleic acid amplification using nicking endonucleases
IN
       Van Ness, Jeffrey, Claremont, CA, UNITED STATES
       Galas, David J., Claremont, CA, UNITED STATES
       Van Ness, Lori K., Claremont, CA, UNITED STATES
PΑ
       Keck Graduate Institute, Claremont, CA, 91711 (U.S. corporation)
PΙ
       US 2003082590
                          A1
                               20030501
ΔΤ
       US 2002-197626
                          A1
                               20020715 (10)
PRAT
       US 2002-345445P
                          20020102 (60)
       US 2001-331687P
                           20011119 (60)
       US 2001-305637P
                           20010715 (60)
DT
       Utility
FS
       APPLICATION
LREP
       SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,
       SEATTLE, WA, 98104-7092
CLMN
       Number of Claims: 216
ECT.
       Exemplary Claim: 1
       27 Drawing Page(s)
DRWN
LN.CNT 4889
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention provides methods and composition for exponential
       nucleic acid amplification using nicking agents. The invention is useful
       in many areas such as disease diagnosis, genetic variation detection and
       pre-mRNA alternative splicing analysis.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L10 ANSWER 14 OF 26 USPATFULL on STN
AN
       2003:64663 USPATFULL
       Iterative and regenerative DNA sequencing method
TI
IN
       Jones, Douglas H., Iowa City, IA, UNITED STATES
PA
       University of Iowa Research Foundation (U.S. corporation)
PΤ
       US 2003044784
                          A1
                               20030306
ΑI
       US 2001-837621
                          A1
                               20010417 (9)
RLI
       Division of Ser. No. US 1998-35183, filed on 5 Mar 1998, GRANTED, Pat.
       No. US 6258533 Continuation-in-part of Ser. No. US 1996-742755, filed on
       1 Nov 1996, GRANTED, Pat. No. US 5858671
DТ
       Utility
FS
       APPLICATION
LREP
       LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109
CLMN
       Number of Claims: 184
ECL
       Exemplary Claim: 1
DRWN
       9 Drawing Page(s)
LN.CNT 4451
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
```

An iterative and regenerative method for sequencing DNA is described. This method sequences DNA in discrete intervals starting at one end of a

double stranded DNA segment. This method overcomes problems inherent in other sequencing methods, including the need for gel resolution of DNA fragments and the generation of artifacts caused by single-stranded DNA secondary structures. A particular advantage of this invention is that it can create offset collections of DNA segments and sequence the segments in parallel to provide continuous sequence information over long intervals. This method is also suitable for automation and multiplex automation to sequence large sets of segments.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Methods for detecting a target molecule

L10 ANSWER 15 OF 26 USPATFULL on STN 2003:30204 USPATFULL

ΑN

ΤI

```
Sampson, Jeffrey R., Burlingame, CA, UNITED STATES
ΙN
       Gordon, Gary B., Saratoga, CA, UNITED STATES
       Luebke, Kevin J., Dallas, TX, UNITED STATES
       Myerson, Joel, Berkeley, CA, UNITED STATES
PΙ
       US 2003022150
                       A1 20030130
ΑI
       US 2001-915044
                        A1 20010724 (9)
DT
       Utility
FS
       APPLICATION
       AGILENT TECHNOLOGIES, INC., Legal Department, DL429, Intellectual
LREP
       Property Administration, P.O. Box 7599, Loveland, CO, 80537-0599
CLMN
       Number of Claims: 61
ECL
       Exemplary Claim: 1
DRWN
       3 Drawing Page(s)
LN.CNT 1541
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       A method for detecting a target moiety is disclosed. In one embodiment,
       a plurality of electrodes supported by a semiconductor substrate are
       brought into proximity with a reaction medium comprising a sample
       suspected of containing the target molecule. Each of the electrodes
       comprises at least one target probe. A plurality of cells within the
       semiconductor substrate are selectively addressed to apply a stimulus to
       each of the electrodes to activate a predetermined redox active moiety
       that is associated with an electrode and to detect, by means of the
       electrodes, corresponding responses produced as a result of the
       activation of the redox active moieties. The magnitude of the
       corresponding responses indicates the presence or absence of the target
       molecule in the sample.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L10 ANSWER 16 OF 26 USPATFULL on STN
AN
       2003:3428 USPATFULL
TI
       Methods and devices for measuring differential gene expression
IN
       Rothberg, Jonathan Marc, Guilford, CT, UNITED STATES
       Nallur, Girish N., Guilford, CT, UNITED STATES
       Hu, Xinghua, New Haven, CT, UNITED STATES
PA
       CuraGen Corporation (U.S. corporation)
PΙ
       US 2003003463
                         A1
                               20030102
                               20011121 (9)
ΑI
       US 2001-989364
                        A1
       Continuation of Ser. No. US 1998-203231, filed on 2 Dec 1998, PATENTED
RLI
PRAI
       US 1997-105305P 19971203 (60)
DT
       Utility
FS
       APPLICATION
LREP
       PENNIE AND EDMONDS, 1155 AVENUE OF THE AMERICAS, NEW YORK, NY, 100362711
CLMN
       Number of Claims: 99
ECL
       Exemplary Claim: 1
DRWN
       14 Drawing Page(s)
LN.CNT 6255
```

This invention includes methods for identifying nucleic acids in a sample of nucleic acids by observing sequence sets present in the nucleic acids of the sample and then identifying those sequences in a nucleic acid sequence database having the sequence sets observed. In a

preferred embodiment, a sequence set consists of two primary

subsequences and an additional subsequence having determined mutual relationships. The methods include those for observing the sequence sets and those for performing sequence database searches. This invention also includes devices for recognizing in parallel the additional subsequences in a sample of as well as methods for the use of these devices. In a preferred embodiment, the devices include probes bound to a planar surface that recognize additional subsequence by hybridization, and the methods of use include features to improve the specificity and reproducibility of this hybridization.

CAS INDEXING IS AVAILABLE FOR THIS PATENT. L10 ANSWER 17 OF 26 USPATFULL on STN AN 2002:301102 USPATFULL ΤI Analysis of polynucleotide sequence Taylor, Seth, Cambridge, MA, UNITED STATES ΙN PA Seth Taylor (U.S. corporation) PΙ US 2002168645 A1 20021114 US 2001-884425 20010619 (9) AΙ Α1 Continuation of Ser. No. US 1999-293333, filed on 16 Apr 1999, ABANDONED RLI PRAI US 1998-82063P 19980416 (60) US 1998-84085P 19980504 (60) DT Utility FS APPLICATION LREP LOUIS MYERS, Fish & Richardson P.C., 225 Franklin Street, Boston, MA, 02110-2804 Number of Claims: 66 CLMN ECLExemplary Claim: 1 DRWN 3 Drawing Page(s) LN.CNT 1556 CAS INDEXING IS AVAILABLE FOR THIS PATENT. Disclosed are methods for detecting nucleic acids using rolling circle-based amplification and arrays of capture probes. CAS INDEXING IS AVAILABLE FOR THIS PATENT. L10 ANSWER 18 OF 26 USPATFULL on STN AN2002:300795 USPATFULL ΤI COMPOSITIONS AND METHODS FOR DELIVERY OF AGENTS FOR NEURONAL REGENERATION AND SURVIVAL IN BAIRD, ANDREW, UNITED STATES PΙ US 2002168338 A1 20021114 US 6551618 B2 20030422 ΑI US 1998-178286 A1 19981023 (9) Continuation-in-part of Ser. No. US 1998-88419, filed on 1 Jun 1998, RLI ABANDONED DTUtility FS APPLICATION SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, LREP SEATTLE, WA, 98104-7092 CLMN Number of Claims: 80 ECL Exemplary Claim: 1 DRWN 7 Drawing Page(s) LN.CNT 3899 CAS INDEXING IS AVAILABLE FOR THIS PATENT. AΒ Devices useful in the delivery of DNA encoding neurotrophic agents, anti-fibrotic agents, and related compositions are disclosed herein for use in the treatment of central and/or peripheral nervous system injury. Methods of making and using the disclosed devices and DNA are also described. In various embodiments, the invention also discloses compositions and devices that may further include a targeting agent,

such as a polypeptide that is reactive with an FGF receptor (e.g., bFGF), or another ligand that binds to cell surface receptors on

axon as it grows through a device or composition of the present

invention, or via transfection of a repair cell.

neuronal cells, or a support cell. The invention also discloses methods of promoting neuronal survival and regeneration via transfection of an

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

```
L10 ANSWER 19 OF 26 USPATFULL on STN
       2002:294294 USPATFULL
ΑN
       Bifunctional molecules and vectors complexed therewith for targeted gene
ΤI
       Nemerow, Glen R., Encinitas, CA, UNITED STATES
IN
       Li, Erguang, San Diego, CA, UNITED STATES
       The Scripps Research Institute (U.S. corporation)
PA
       US 2002164333
                       A1 20021107
PΤ
       US 2001-903327
                        A1
                               20010710 (9)
AΙ
       US 2000-325781P
PRAI
                         20000710 (60)
DT
       Utility
FS
       APPLICATION
       STEPHANIE SEIDMAN, HELLER EHRMAN WHITE & MCAULIFFE LLP, 4350 LA JOLLA
LREP
       VILLAGE DRIVE, 7th FL., SAN DIEGO, CA, 92122-1246
CLMN
       Number of Claims: 39
       Exemplary Claim: 1
ECL
DRWN
       No Drawings
LN.CNT 3999
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       Methods and products for targeting delivery vectors, such as adenoviral
       gene delivery particles, to selected cell types are provided. The
       methods rely on targeting by a bifunctional molecule that specifically
       complexes with a protein on the vector particle surface and with
       targeted cell surface proteins. The targeted cell surface proteins are
       any that activate the phosphatidylinositol-3-OH kinases. The
       bifunctional molecules, compositions, kits, and methods of preparation
       and use of the vector/bifunctional molecules for gene therapy are
       provided.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L10 ANSWER 20 OF 26 USPATFULL on STN
AN
       2002:141073 USPATFULL
TΙ
       Iterative and regenerative DNA sequencing method
IN
       Jones, Douglas H., Iowa City, IA, UNITED STATES
PA
       The University of Iowa Research Foundation (U.S. corporation)
PΙ
       US 2002072055
                          A1
                               20020613
       US 6599703
                          B2
                               20030729
                               20010216 (9)
ΑI
       US 2001-788038
                          A1
RLI
       Division of Ser. No. US 1999-226683, filed on 7 Jan 1999, GRANTED, Pat.
       No. US 6190889 Division of Ser. No. US 1996-742755, filed on 1 Nov 1996,
       GRANTED, Pat. No. US 5858671
DT
       Utility
FS
      APPLICATION
LREP
      LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109
CLMN
       Number of Claims: 181
ECL
       Exemplary Claim: 1
DRWN
       9 Drawing Page(s)
LN.CNT 4229
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AΒ
       An iterative and regenerative method for sequencing DNA is described.
       This method sequences DNA in discrete intervals starting at one end of a
       double stranded DNA segment. This method overcomes problems inherent in
       other sequencing methods, including the need for gel resolution of DNA
       fragments and the generation of artifacts caused by single-stranded DNA
       secondary structures. A particular advantage of this invention is that
       it can create offset collections of DNA segments and sequence the
       segments in parallel to provide continuous sequence information over
       long intervals. This method is also suitable for automation and
```

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 21 OF 26 USPATFULL on STN

AN 2002:99090 USPATFULL

TI Method for the detection of an analyte by means of a nucleic acid

multiplex automation to sequence large sets of segments.

reporter
IN Baez, Luis, West Chester, PA, UNITED STATES
Ebersole, Richard C., Newark, DE, UNITED STATES
Hendrickson, Edwin R., Hockessin, DE, UNITED STATES
Neelkantan, Neel, Newark, DE, UNITED STATES
Perry, Michael P., Downington, PA, UNITED STATES
PI US 2002051986 A1 20020502

PI US 2002051986 A1 20020502 US 6511809 B2 20030128 AI US 2001-858994 A1 20010516 (9) PRAI US 2000-211293P 20000613 (60)

DT Utility FS APPLICATION

LREP E I DU PONT DE NEMOURS AND COMPANY, LEGAL DEPARTMENT - PATENTS, 1007

MARKET STREET, WILMINGTON, DE, 19898

CLMN Number of Claims: 25 ECL Exemplary Claim: 1 DRWN 9 Drawing Page(s) LN.CNT 2070

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Approcess is disclosed for the detection of an analyte utilizing a nucleic acid label as a reporter. The analyte is detected by the binding of at least two reporter conjugates, each conjugate comprising a member of a binding pair and a nucleic acid label. The binding of the reporter conjugates to the analyte facilitates the juxtaposition of the nucleic acid labels, forming a single nucleic acid amplicon. The amplicon may then be detected directly, or may be used as a template of the generation of amplification products. Detection of the analyte by this process significantly reduces assay background caused by non-specific reporter conjugate binding.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 22 OF 26 USPATFULL on STN

AN 2002:50777 USPATFULL

TI Methods and devices for measuring differential gene expression

IN Rothberg, Jonathan Marc, Guilford, CT, United States

Nallur, Girish N., Guilford, CT, United States

Hu, Xinghua, New Haven, CT, United States

PA CuraGen Corporation, New Haven, CT, United States (U.S. corporation)

PI US 6355423 B1 20020312 AI US 1998-203231 19981202 (9) PRAI US 1997-105305P 19971203 (60)

DT Utility FS GRANTED

EXNAM Primary Examiner: Fredman, Jeffrey

LREP Pennie & Edmonds LLP CLMN Number of Claims: 45 ECL Exemplary Claim: 1

DRWN 16 Drawing Figure(s); 14 Drawing Page(s)

LN.CNT 5717

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention includes methods for identifying nucleic acids in a sample of nucleic acids by observing sequence sets present in the nucleic acids of the sample and then identifying those sequences in a nucleic acid sequence database having the sequence sets observed. In a preferred embodiment, a sequence set consists of two primary subsequences and an additional subsequence having determined mutual relationships. The methods include those for observing the sequence sets and those for performing sequence database searches. This invention also includes devices for recognizing in parallel the additional subsequences in a sample of as well as methods for the use of these devices. In a preferred embodiment, the devices include probes bound to a planar surface that recognize additional subsequence by hybridization, and the methods of use include features to improve the specificity and reproducibility of this hybridization.

```
AN
       2001:107618 USPATFULL
ΤI
       Iterative and regenerative DNA sequencing method
IN
       Jones, Douglas H., Iowa City, IA, United States
       The University of Iowa Research Foundation, Iowa City, IA, United States
PA
       (U.S. corporation)
ΡI
       US 6258533
                          В1
                               20010710
ΑI
       US 1998-35183
                               19980305 (9)
       Continuation-in-part of Ser. No. US 1996-742755, filed on 1 Nov 1996,
RLT
       now patented, Pat. No. US 5858671, issued on 12 Jan 1999
DT
       Utility
FS
       GRANTED
EXNAM Primary Examiner: Horlick, Kenneth R.
LREP
       Lahive & Cockfield, LLP, Lauro, Esq., Peter C., Hanley, Esq., Elizabeth
CLMN
       Number of Claims: 32
ECL
       Exemplary Claim: 1
DRWN
       9 Drawing Figure(s); 9 Drawing Page(s)
LN.CNT 3720
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AΒ
       An iterative and regenerative method for sequencing DNA is described.
       This method sequences DNA in discrete intervals starting at one end of a
       double stranded DNA segment. This method overcomes problems inherent in
       other sequencing methods, including the need for gel resolution of DNA
       fragments and the generation of artifacts caused by single-stranded DNA
       secondary structures. A particular advantage of this invention is that
       it can create offset collections of DNA segments and sequence the
       segments in parallel to provide continuous sequence information over
       long intervals. This method is also suitable for automation and
       multiplex automation to sequence large sets of segments.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L10 ANSWER 24 OF 26 USPATFULL on STN
AN
       2001:25654 USPATFULL
       Methods for removing primer sequences and blocking restriction
TI
       endonuclease recognition domains
IN
       Jones, Douglas H., Iowa City, IA, United States
PA
       University of Iowa Research Foundation, Iowa City, IA, United States
       (U.S. corporation)
PΙ
       US 6190889
                               20010220
                          B1
ΑI
       US 1999-226683
                               19990107 (9)
RLI
       Division of Ser. No. US 1996-742755, filed on 1 Nov 1996, now patented,
       Pat. No. US 5858671
DT
       Utility
FS
       Granted
EXNAM Primary Examiner: Horlick, Kenneth R.
LREP
       Lahive & Cockfield, LLP, Hanley, Esq., Elizabeth A., Lauro, Esq., Peter
CLMN
       Number of Claims: 17
ECL
       Exemplary Claim: 1
DRWN
       9 Drawing Figure(s); 9 Drawing Page(s)
LN.CNT 3531
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB
       An iterative and regenerative method for sequencing DNA is described.
       This method sequences DNA in discrete intervals starting at one end of a
       double stranded DNA segment. This method overcomes problems inherent in
       other sequencing methods, including the need for gel resolution of DNA
       fragments and the generation of artifacts caused by single-stranded DNA
       secondary structures. A particular advantage of this invention is that
       it can create offset collections of DNA segments and sequence the
       segments in parallel to provide continuous sequence information over
       long intervals. This method is also suitable for automation and
```

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

multiplex automation to sequence large sets of segments.

L10 ANSWER 23 OF 26 USPATFULL on STN

```
1999:146248 USPATFULL
ΑN
ΤI
       Amplification of assay reporters by nucleic acid replication
IN
       Collier, David Nash, Wilmington, DE, United States
       Ebersole, Richard Calvin, Wilmington, DE, United States
       Hatfield, Tina Marie, Elkton, MD, United States
       Hendrickson, Edwin R., Hockessin, DE, United States
       Moran, John Richard, Charleston, SC, United States
       E. I. du Pont de Nemours and Company, Wilmington, DE, United States
PA
       (U.S. corporation)
PΙ
       US 5985548
                               19991116
       WO 9315229 19930805
       US 1995-256627
                               19950213 (8)
ΑT
       WO 1993-US1281
                               19930204
                               19950213 PCT 371 date
                               19950213 PCT 102(e) date
DT
       Utility
FS
       Granted
EXNAM
       Primary Examiner: Zitomer, Stephanie W.; Assistant Examiner: Rees, Diane
CLMN
       Number of Claims: 27
ECL
       Exemplary Claim: 1
       7 Drawing Figure(s); 7 Drawing Page(s)
DRWN
LN.CNT 2610
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       A method for the amplified detection of an analyte, wherein
AΒ
       amplification is achieved by replication of a target nucleic acid
       sequence which has been immobilized in response to analyte.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L10 ANSWER 26 OF 26 USPATFULL on STN
AN
       1999:4338 USPATFULL
TI
       Iterative and regenerative DNA sequencing method
IN
       Jones, Douglas H., Iowa City, IA, United States
PA
       The University of Iowa Research Foundation, Iowa City, IA, United States
       (U.S. corporation)
PΙ
       US 5858671
                               19990112
ΑI
       US 1996-742755
                               19961101 (8)
DT
       Utility
FS
       Granted
       Primary Examiner: Horlick, Kenneth R.
EXNAM
LREP
       Lahive & Cockfield, LLP, Hanley, Elizabeth A.
CLMN
       Number of Claims: 118
       Exemplary Claim: 1
ECL
DRWN
       9 Drawing Figure(s); 9 Drawing Page(s)
LN.CNT 4068
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AΒ
       An iterative and regenerative method for sequencing DNA is described.
       This method sequences DNA in discrete intervals starting at one end of a
       double stranded DNA segment. This method overcomes problems inherent in
       other sequencing methods, including the need for gel resolution of DNA
       fragments and the generation of artifacts caused by single-stranded DNA
       secondary structures. A particular advantage of this invention is that
       it can create offset collections of DNA segments and sequence the
       segments in parallel to provide continuous sequence information over
```

long intervals. This method is also suitable for automation and

multiplex automation to sequence large sets of segments.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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=> d his
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(FILE 'HOME' ENTERED AT 14:20:44 ON 16 MAR 2005) FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 14:21:02 ON 16 MAR 2005 392 S OLIGONUCLEOTIDE? (5A) PRECURSOR L1L2 . 5 S L1 AND DIOXETANE 5 DUP REM L2 (0 DUPLICATES REMOVED) L3 40 S L1 AND CHEMILUMINESC? T.4 35 S L4 NOT L3 L5 26 S L5 AND ARRAY? L6 L7 26 DUP REM L6 (0 DUPLICATES REMOVED) L8 0 S L7 AND OLIGO? (7A) CHEMILUMESC? 0 S L8 AND PRECURSOR L926 S L7 AND PRECURSOR? L10 L11 9 S L5 NOT L6 => s chemiluminesc? (7a) (oligo? or probe?) 3799 CHEMILUMINESC? (7A) (OLIGO? OR PROBE?) L12=> s 112 and (array? or surface? or support?) 4 FILES SEARCHED... 2212 L12 AND (ARRAY? OR SURFACE? OR SUPPORT?) L13 => s 113 and plurality (3a) (oligo? or probe?) 389 L13 AND PLURALITY (3A) (OLIGO? OR PROBE?) => s 114 and precursor 250 L14 AND PRECURSOR => s 115 and triggere? 226 L15 AND TRIGGERE? => s 116 and (oligo? or probe?)(3a) chemilumesc? 0 L16 AND (OLIGO? OR PROBE?) (3A) CHEMILUMESC? => s l16 and (oligo? or probe?)(4a) (bond? or link?)(5a) chemilumines? L180 L16 AND (OLIGO? OR PROBE?) (4A) (BOND? OR LINK?) (5A) CHEMILUMINE => s 116 and dioxetane 1 L16 AND DIOXETANE L19=> d 119 bib abs L19 ANSWER 1 OF 1 USPATFULL on STN AN2003:194475 USPATFULL TI Solid phases optimized for chemiluminescent detection ΙN Edwards, Brooks, Cambridge, MA, UNITED STATES Geiser, Timothy G., San Mateo, CA, UNITED STATES Menchen, Steven M., Fremont, CA, UNITED STATES Sparks, Alison L., North Andover, MA, UNITED STATES Voyta, John C., Sudbury, MA, UNITED STATES PΙ US 2003134286 A1 20030717 US 2002-46730 ΑI A1 20020117 (10) DT Utility FS APPLICATION Supervisor, Patent Prosecution Services, PIPER MARBURY RUDNICK & WOLFE LREP LLP, 1200 Nineteenth Street, N.W., Washington, DC, 20036-2412 CLMN Number of Claims: 67 ECL Exemplary Claim: 1 DRWN 10 Drawing Page(s) LN.CNT 1191 CAS INDEXING IS AVAILABLE FOR THIS PATENT. ΑB Solid supports for chemiluminescent assays are provided. The solid support includes a plurality of probes covalently or physically attached to the support

surface and a chemiluminescent enhancing moiety incorporated
onto the surface or into the bulk of the support.
The solid support can be a multi-layered support
including an upper probe binding layer (e.g., an azlactone polymer layer
or porous functional polyamide layer) adjacent to a cationic microgel
layer. The azlactone-functional polymer can be a copolymer of
dimethylacrylamide and vinylazlactone crosslinked with ethylenediamine.
The cationic microgel layer can be a cross-linked quaternary onium salt
containing polymer. A method and a kit for conducting chemiluminescent
assays using the solid supports is also provided. The kit
comprises a dioxetane substrate, a biopolymer probe-enzyme
complex, and a solid support. The solid support can
be an azlactone functional polymer layer adjacent to a cationic microgel
layer; a porous polyamide functional layer adjacent to a cationic
microgel layer; or a quaternized azlactone functional polymer layer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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       Solid phases optimized for chemiluminescent detection
IN
       Edwards, Brooks, Cambridge, MA, UNITED STATES
       Geiser, Timothy G., San Mateo, CA, UNITED STATES
       Menchen, Steven M., Fremont, CA, UNITED STATES
       Sparks, Alison L., North Andover, MA, UNITED STATES
       Voyta, John C., Sudbury, MA, UNITED STATES
                        A1 20030717
ΡI
       US 2003134286
ΑI
       US 2002-46730
                         A1
                               20020117 (10)
DT
       Utility
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       APPLICATION
LREP
       Supervisor, Patent Prosecution Services, PIPER MARBURY RUDNICK & WOLFE
       LLP, 1200 Nineteenth Street, N.W., Washington, DC, 20036-2412
CLMN
       Number of Claims: 67
ECL
       Exemplary Claim: 1
       10 Drawing Page(s)
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LN.CNT 1191
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB
       Solid supports for chemiluminescent assays are provided. The
       solid support includes a plurality of probes
       covalently or physically attached to the support
       surface and a chemiluminescent enhancing moiety incorporated
       onto the surface or into the bulk of the support.
       The solid support can be a multi-layered support
       including an upper probe binding layer (e.g., an azlactone polymer layer
       or porous functional polyamide layer) adjacent to a cationic microgel
       layer. The azlactone-functional polymer can be a copolymer of
       dimethylacrylamide and vinylazlactone crosslinked with ethylenediamine.
       The cationic microgel layer can be a cross-linked quaternary onium salt
       containing polymer. A method and a kit for conducting chemiluminescent
       assays using the solid supports is also provided. The kit
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comprises a dioxetane substrate, a biopolymer probe-enzyme complex, and

azlactone functional polymer layer adjacent to a cationic microgel layer; a porous polyamide functional layer adjacent to a cationic microgel layer; or a quaternized azlactone functional polymer layer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

a solid support. The solid support can be an